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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,929

04/15/2008

Norbert Weber

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1609 7590 08/20/2008

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EXAMINER

BRINSON, PATRICK F

ART UNIT

PAPER NUMBER

3754

MAIL DATE

DELIVERY MODE

08/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,929	<b>Applicant(s)</b> WEBER, NORBERT	
	<b>Examiner</b> Patrick F. Brinson	<b>Art Unit</b> 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/5/2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by 5,992,948 to **Gowda**.

The patent to **Gowda** discloses a piston accumulator with a separating piston (72) which is axially displaceable within the accumulator housing (70) and separates two spaces within the housing from each other, especially the gas side (86) from the fluid side of the accumulator, wherein the separating piston consists largely or completely of a plastic material, as recited in claim 1. The piston is formed using injection molding techniques, and is preferably formed of polyphenylene sulfide, including glass fibers, as recited in claim 2. The piston borders a cavity (128) which is open in the section of the gas side (86) of the accumulator housing, as recited in claim 4. The outer circumferential side of the piston includes groove like recesses which serve the purpose of holding seals (96), as recited in claim 8.

2. Claims 1, 4, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 6,539,976 to **Whiteside**.

The patent to **Whiteside** discloses a piston accumulator with a separating piston (40) which is axially displaceable within the accumulator housing (18) and separates two spaces within the housing from each other, especially the gas side from the fluid side of the accumulator, wherein the separating piston consists largely or completely of a plastic material, as recited in claim 1. Fig. 9 illustrates the separating piston bordering a cavity (46) which is open to the gas side of the accumulator housing, as recited in claim 4. Within the cavity are stiffening cross pieces (115) that extend diametrically to the longitudinal axis of the housing, extend from the longitudinal axis to the cylindrical inside wall of the piston which laterally borders the cavity. The outer circumferential side of the piston includes groove like recesses (100) which serve the purpose of holding seals (42), as recited in claim 8.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gowda** in view of GB 2,341,812 to **Stephenson et al.**

**Gowda** discloses the recited structure including providing the separating piston that is formed from a fiber reinforced plastic material. **Gowda**, however, does not disclose the material being a fiber glass reinforced polyaryl amide. The **Stephenson et al.** reference discloses a collet formed of a glass reinforced thermoplastic formed from a variety of materials including polyarylamide. It is disclosed that the collet is normally formed from steel, but that the reinforced polyarylamide provides the collet that can be injection molded much in the same way as a collet formed from steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute for the material used to form the piston of **Gowda**, a glass reinforced polyarylamide as suggested by **Stephenson et al.** in order to produce a piston that has essentially the same coefficient of expansion as steel which has previously been known as used in separating pistons.

***Allowable Subject Matter***

4. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The recited patents are pertinent to Applicant's invention in disclosing piston separating accumulators wherein the pistons are formed of a plastic material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (571) 272-4897. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kevin P. Shaver** can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick F. Brinson/  
Primary Examiner, Art Unit 3754

P. F. Brinson  
August 15, 2008